PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new Traffic Control Signal with existing street lighting at the intersection of MD 276 and MD 275 in Cecil County. MD 276 is assumed to run a north-south direction. Currently, the intersection is controlled by a flasher

II. INTERSECTION OPERATION

1. The intersection is to operate in a NEMA four-phase, fully-actuated mode, with the MD 276 approaches running concurrently. An Exclusive/Permissive lagging left turn phase shall be provided for the southbound approach of MD 276. An overlapping right turn phase shall be provided for the westbound approach of MD 275. The MD 275 approach shall run in its own phase.

2. A full-traffic-actuated, eight-phase controller with two (2) four channel, rack mount loop detector amplifiers, with all necessary equipment housed in a NEMA size "6" existing pole-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.

2. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9001	Detector rack power supply (To be instaled by SHA forces)	1 EA
9002	NEMA load switch	4 EA
9016	Detector amplifier 4-channel rack mount (To be installed into the existing cabinet by S.H.A. Forces).	2 EA
9042	Controller ASC II with telemetry	1 EA
9572	Sheet aluminum signs to consist of: (span wire mount)	10.5 SF
	R10-12 "LEFT TURN YIELD ON GREEN (BALL)" sign, (36" x 42") span wire mounted.	1 EA

The contact persons for District #2 are as follows:

Mr. Robert Kiel
Assistant District Engineer - Traffic
Phone: (410) 810-3240

Mr. Terry Wright
Assistant District Engineer - Maintenance
Phone: (410) 810-3250

Mr. Barry Clothier
Assistant District Engineer - Utility
Phone: (410) 810-3060

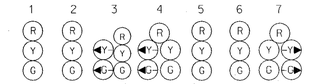
Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY S.H.A..

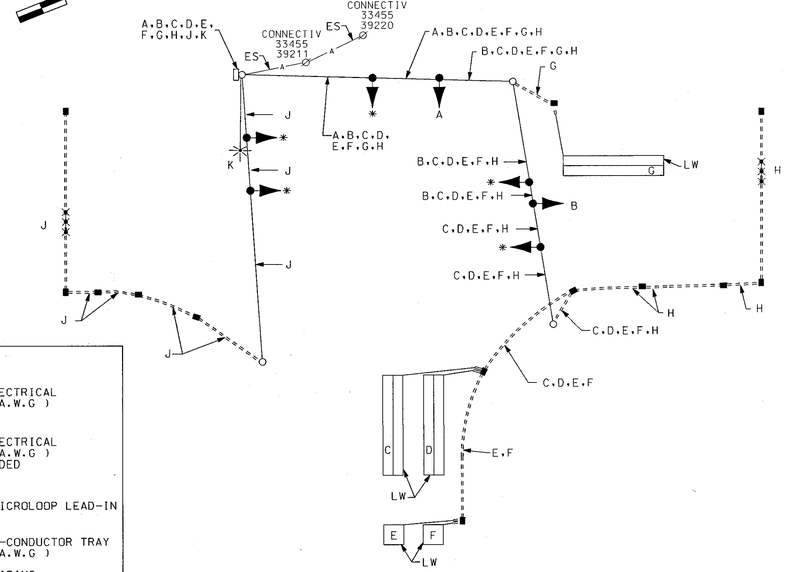
ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	2 EA
5005	24" white heat applied permanent preformed thermoplastic pavement marking.	45 L.F.
8005	Adjust and re-ring existing span wire. (Each Span)	3 EA
8011	Furnish and install 12" vehicular traffic signal head section	24 EA
8015	Furnish and install 3" weatherhead.	3 EA
8019	Furnish and install 8" vehicular traffic signal head section.	3 EA
8043	Furnish and install non-invasive probe set with 1000' lead-in cable.	2 EA
8048	Remove and dispose of existing material and equipment per assignment.	1 EA
8051	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	1020 L.F.
8064	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - bored.	150 L.F.
8068	Furnish and install 1" liquid tight flexible non-metallic conduit for detector sleeve.	30 L.F.
8072	Furnish and install electrical handhole.	13 EA
8075	Install overhead sign.	10.5 S.F.
8081	Furnish and install electrical cable - 2 conductor (aluminum shielded) (No. 14 AWG)	900 L.F.
8085	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	220 L.F.
8087	Furnish and install loop wire encased in flexible tubing (No. 14 AWG).	1500 L.F.
8088	Furnish and install saw cut for signal (loop detector).	475 L.F.

PHASE CHART



PHASE 2 & 6	G	G	G	G	G	R	R	← T
2 & 6 CHANGE	Y	Y	G	G	G	R	R	→ T
PHASE 2 & 5	R	R	◀G-/G	◀G-/G	G	R	R/-G▶	↓ T
2 & 5 CHANGE	R	R	◀Y-/Y	◀Y-/Y	Y	R	R/-Y▶	↑ T
PHASE 4	R	R	R	R	R	G	G	↑
4 CHANGE	R	R	R	R	R	Y	Y	↑
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	← T ↑ T →

WIRING DIAGRAM



WIRING KEY

- A, B } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- C, D, E, F, G } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G) ALUMINUM SHIELDED
- H, J } NON-INVASIVE MICROLOOP LEAD-IN CABLE (1000')
- K - USE EXISTING 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G)
- * - USE EXISTING WIRING
- LW - LOOP WIRE (NO. 14 A.W.G.)
- ES - EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY CONECTIV

SHA #: CE442A591B29 TOD #: XX1065051-41

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 276 AND MD 275

DRAWN BY: ROB CICCHINI	F.A.P. NO.		TS NO. 1502B	SHEET NO. 2 OF 2
CHECKED BY: J. ALLEN Jr.	S.H.A. NO.	XX1065185		
SCALE: NONE	COUNTY:	CECIL	T.I.M.S. NO. F721	
DATE: 2-11-04	LOG MILE:	07027502.25		